

CLAIMS

1. An implantable device including a feedthrough assembly disposed within a hermetically sealed housing of the implantable device and having a temperature sensor comprising:
 - a sleeve outer portion hermetically bonded to the housing;
 - a thermal insulator disposed within the sleeve outer portion;
 - a pin spaced from the housing and at least partially disposed within the thermal insulator; and
 - a temperature sensor disposed within the pin.
2. The device of claim 1, wherein the implantable device is pacemaker cardioverter defibrillator.
3. The device of claim 1, wherein the implantable device is a lead.
4. The device of claim 1, wherein the pin includes an hollow interior and the temperature sensor is disposed within the hollow interior.
5. The device of claim 4, wherein the temperature sensor is in contact with an interior surface of the pin.
6. The device of claim 4, further comprising a thermal barrier disposed within the hollow interior and isolating the temperature sensor from an interior of the housing.
7. The device of claim 6, wherein the thermal barrier extends beyond the hollow interior of the pin and into the interior of the housing.

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8. The device of claim 1, further comprising a sleeve inner portion disposed between the pin and the thermal insulator.
9. An implantable device comprising:
 - means for sensing a physical parameter; and
 - means for hermetically sealing the means for sensing.
10. The device of claim 9, wherein means for sensing is a temperature sensor.
11. A feedthrough assembly comprising:
 - a sleeve disposed within an opening through a housing of an implantable medical device and hermetically sealed to the housing;
 - an insulating ring disposed within the sleeve and hermetically sealed thereto;
 - a pin disposed within and hermetically sealed to the insulating ring, the pin including a hollow, fluid filled interior, a first membrane exposed to an external medium, and a second membrane operably coupled with a sensor disposed within the housing, wherein a physical parameter of the second membrane is sensed by the sensor and correlated to a pressure within the external medium.
12. The feedthrough of claim 10, wherein a surface area of the first membrane is smaller than a surface area of the second membrane.